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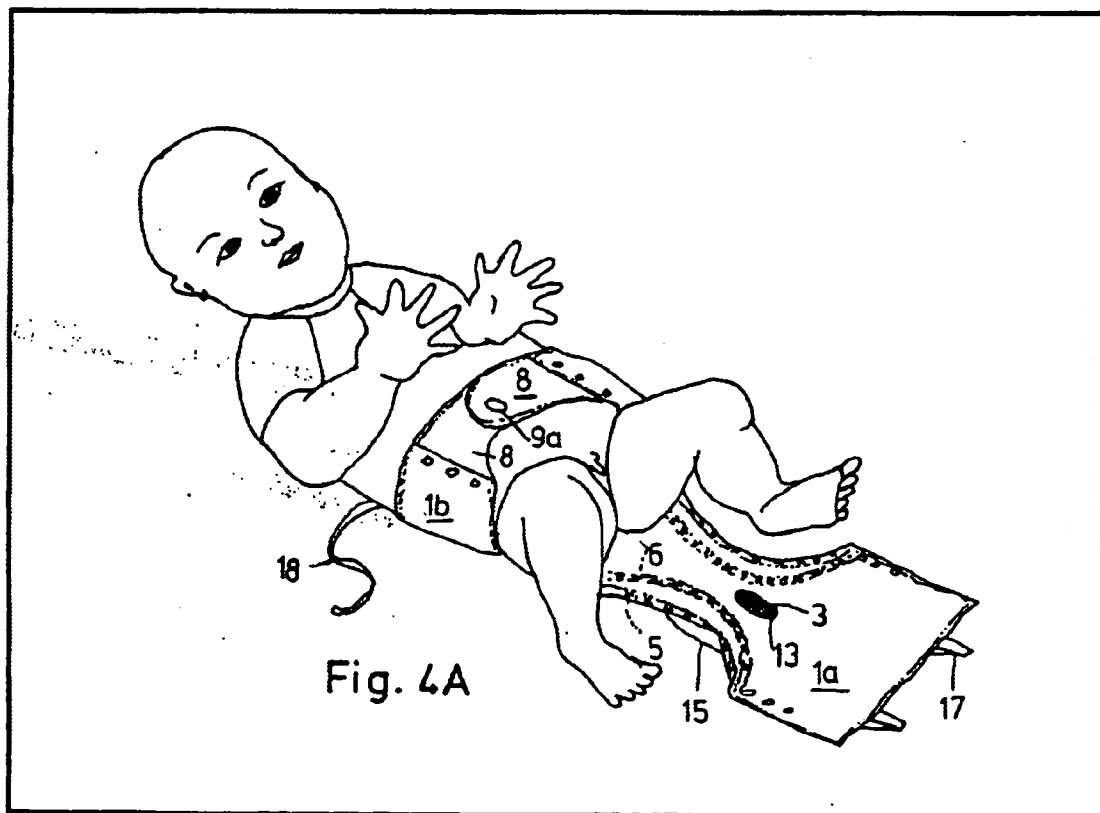
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(54) Baby's nappy

(57) A baby's nappy has a back panel 1b, with wings 8 for bringing around the baby's sides for fastening in front, and a crotch panel 1a passing between the legs and brought up in front for fastening. A wire opening 3 opens onto a urine bag containing absorptive padding 15.



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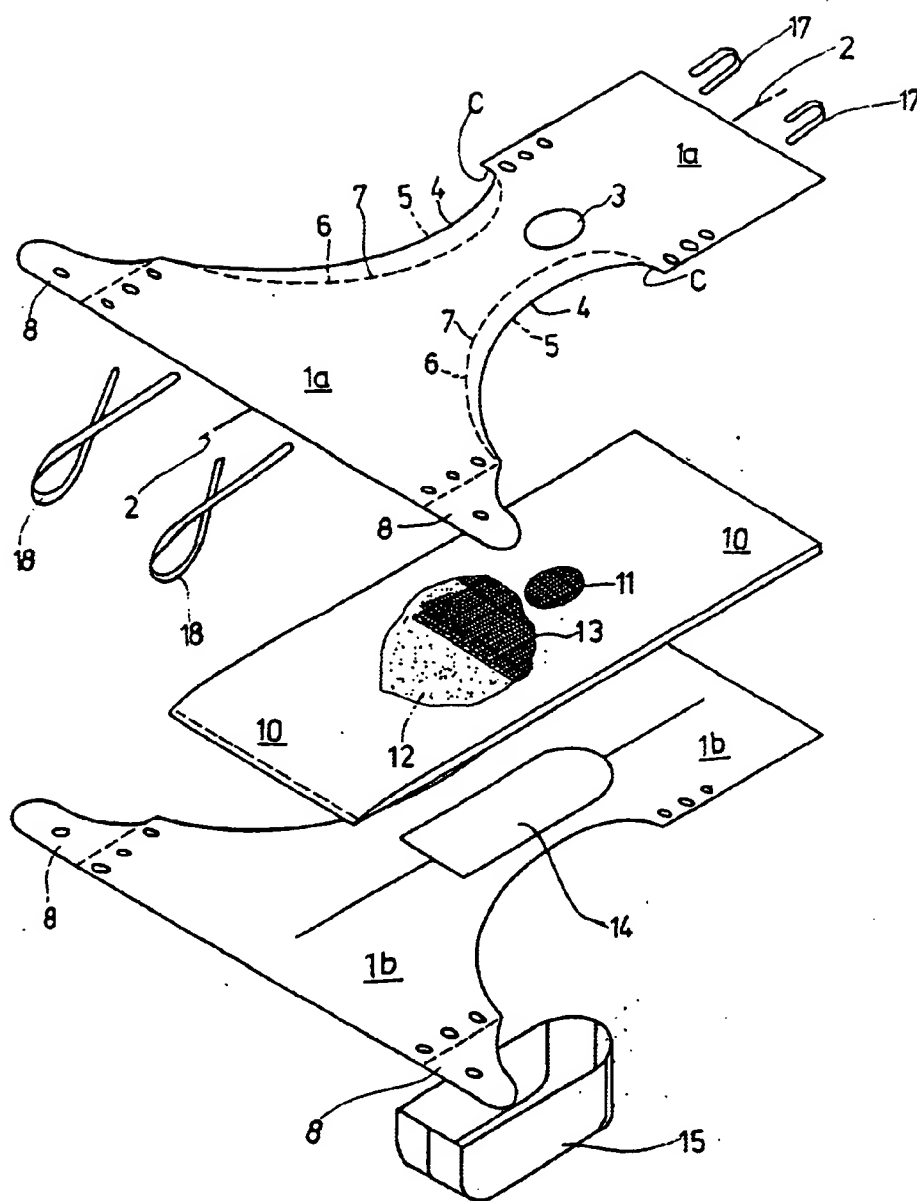
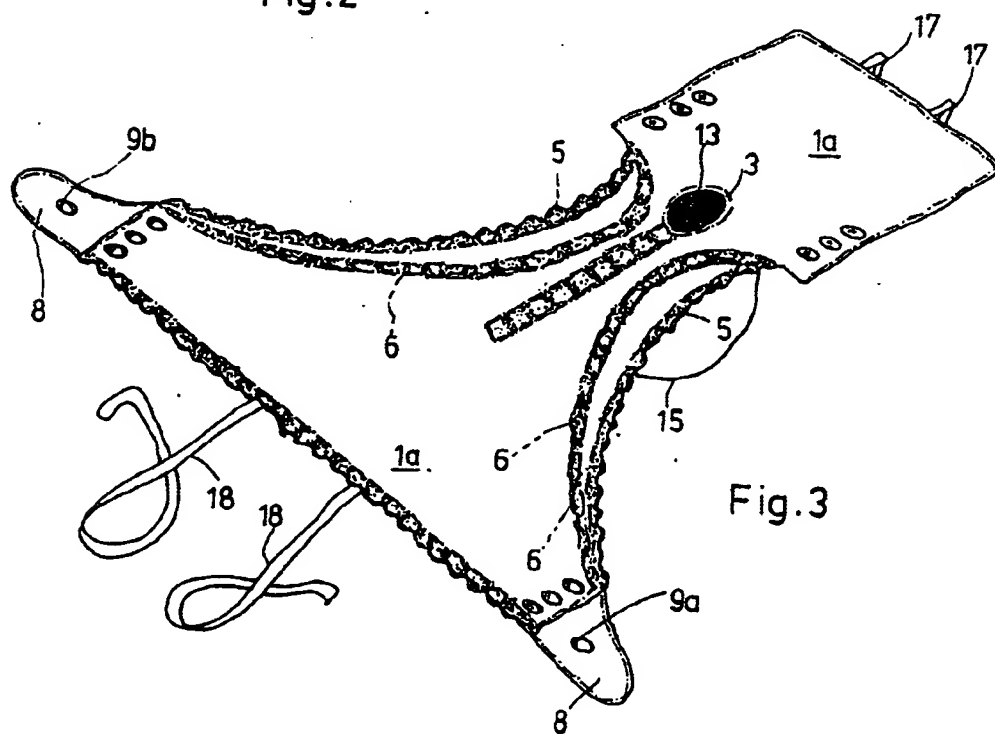
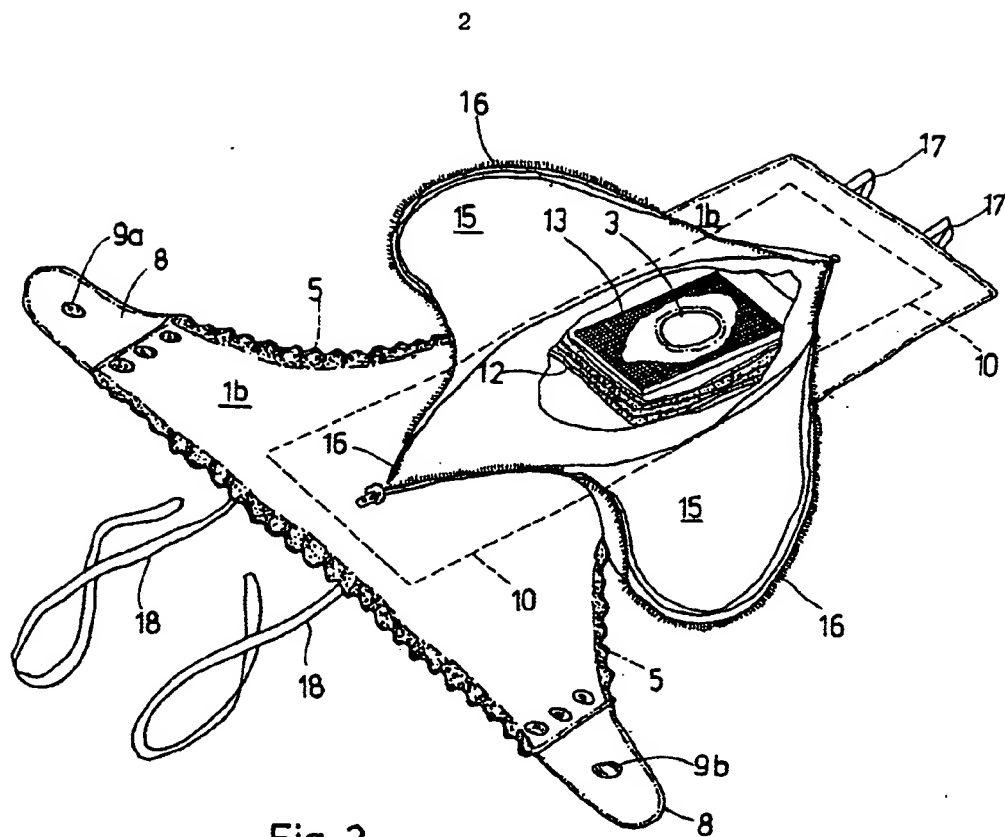
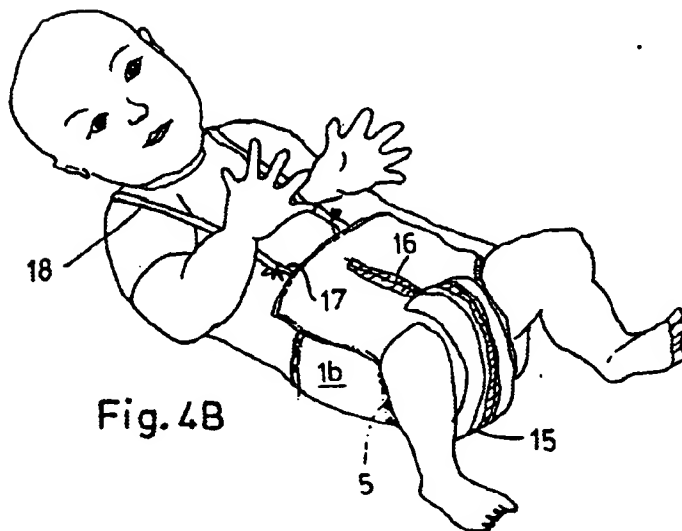
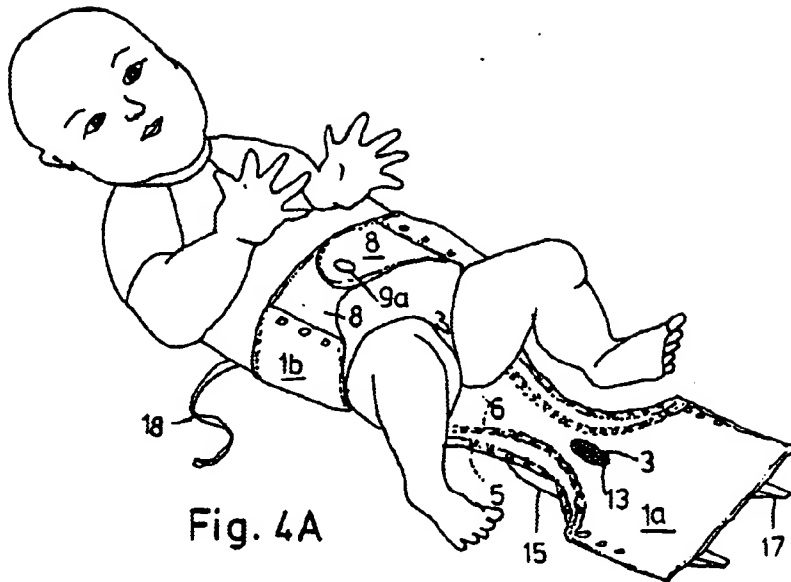


Fig . 1





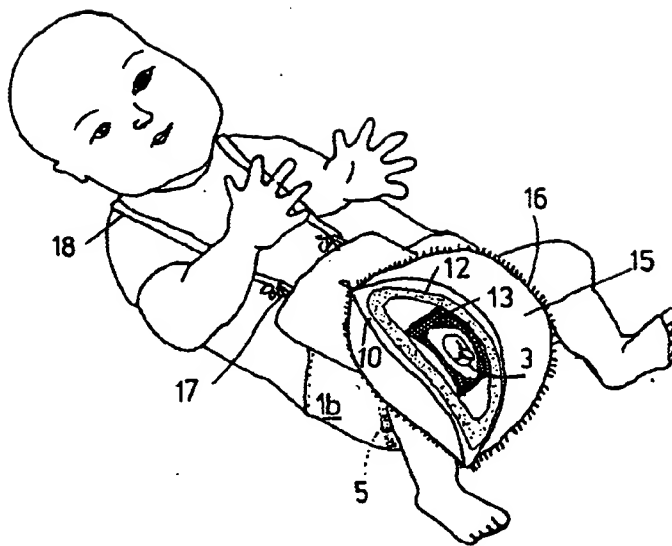


Fig. 5

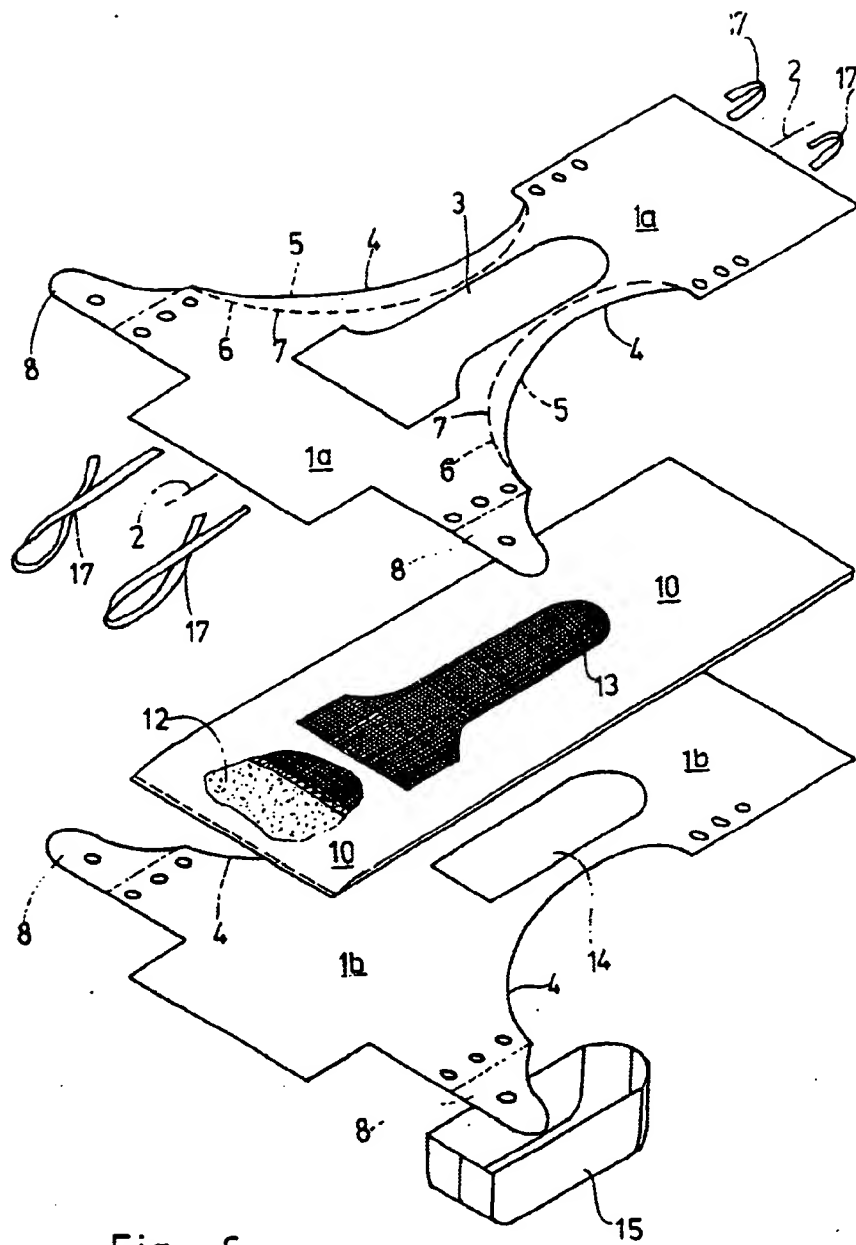


Fig . 6

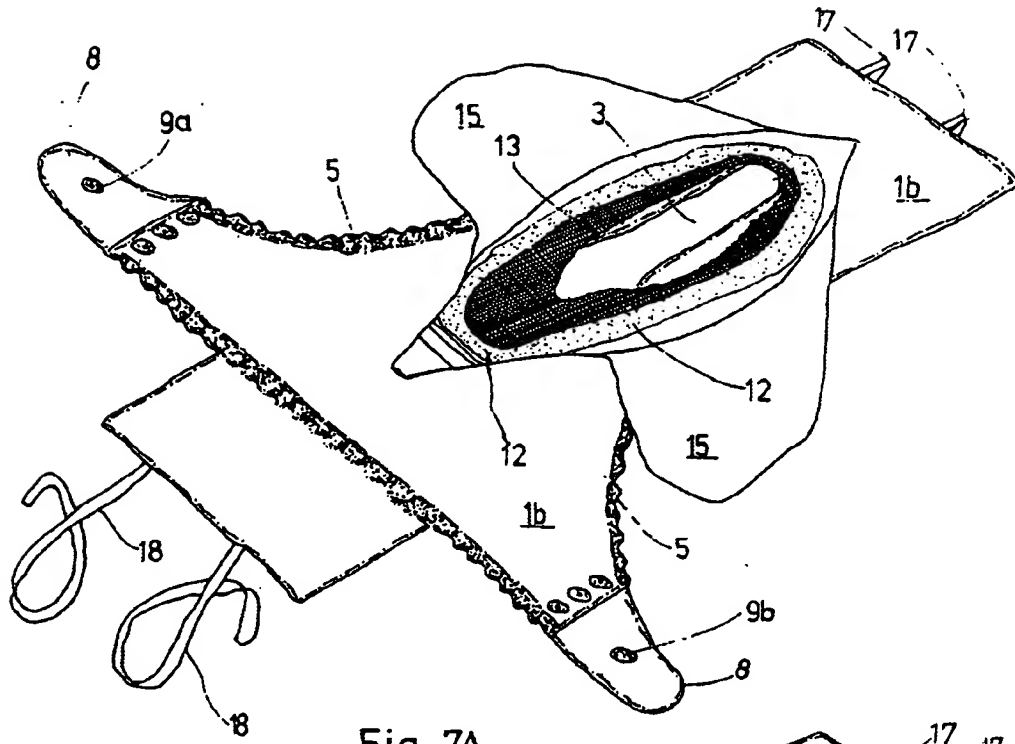


Fig. 7A

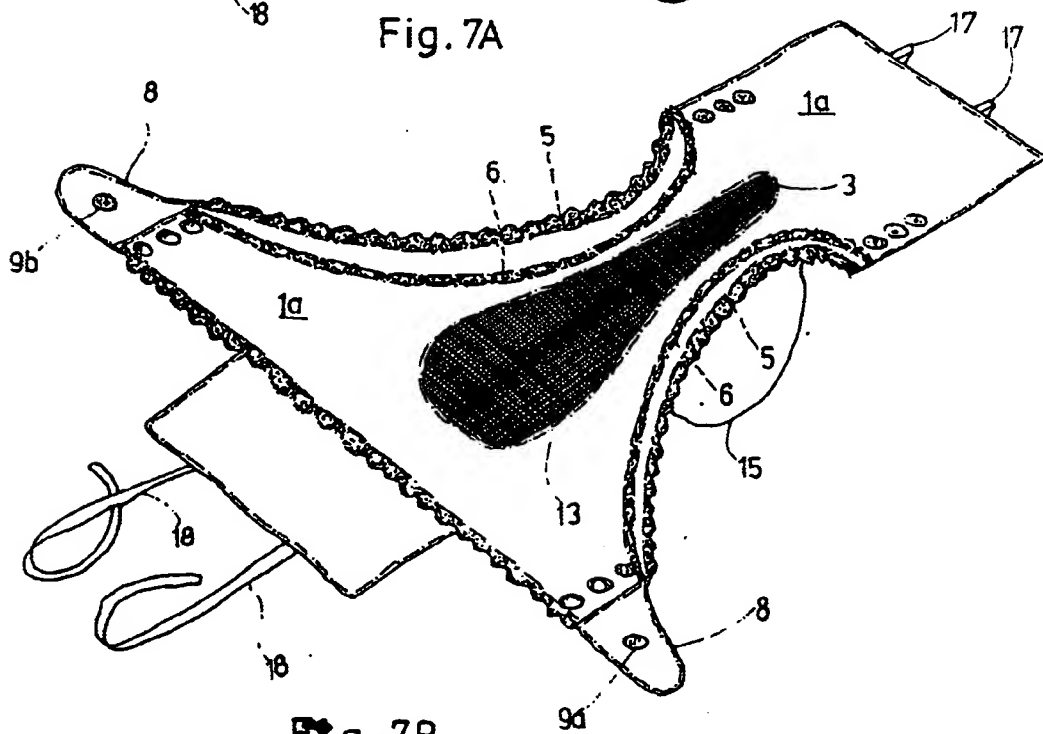


Fig. 7B

## SPECIFICATION

## Baby's nappy

- 5 This invention relates to babies nappies.  
 10 Babies will frequently wet themselves at night requiring a change of nappy depriving both the baby and its parents of sleep. The present applicant has sought to devise embodiments of baby's nappy which will reduce or avoid the requirement for a change of nappy, particularly at night.

- In accordance with the present invention, there is provided a baby's nappy, comprising:  
 15 a back panel adapted to extend across a baby's back, and provided with fastening wings arranged to be brought round the baby's sides for fastening in front; a crotch panel, connected to the pack panel and terminating in a front fastening portion, and arranged to be passed between the baby's legs and to be brought up in front for fastening, the edges of the crotch panel being curved to define leg openings in the fastened nappy;  
 25 and a urine bag adapted to receive urine absorptive padding, and opening onto the inner surface of the nappy at a urine opening.

- Having in mind the difference in anatomy between baby girls and baby boys, differing embodiments of nappy are described in detail below for baby boys and baby girls above the age of four months. Between the ages of two and four months, the anatomical differences prove not so great and a single design of nappy which corresponds to the design for girls above the age of four months may suffice.

- The curved edges defining the leg openings are preferably elasticated. The urine bag is suitably adapted to be opened, as by means of a zip, on the outer side of the nappy so that the urine absorptive padding may be withdrawn and replaced.

- The invention is hereinafter more particularly described by way of example only, with reference to the accompanying drawings, in which:-

- Figure 1* is an exploded perspective view of the various components for forming a baby's nappy suitable for a baby boy older than four months;

- Figure 2* shows the completed nappy formed from the parts shown in *Fig. 1* as seen from the outer side, and with the urine bag zip open;

- Figure 3* is a perspective view of the nappy of *Fig. 2* as seen from its reverse side, i.e. from the inner surface which is placed against the baby's skin;

- Figure 4A* shows the nappy of *Figs. 2* and *3* partly fastened around the baby boy, while *Fig. 4B* shows the nappy fully fastened;

- Figure 5* is a view similar to *Figs. 4A* and *4B* showing the nappy with urine bag zip open and with the urine absorptive padding

partly cut away to show how the nappy fits the baby boy;

- Figure 6* is a view generally similar to *Fig. 1* showing the several parts for forming an embodiment of nappy suitable for baby girls and baby boys of less than four months in age;

- Figures 7A and 7B* are views respectively similar to *Figs. 2* and *3* for a nappy constructed from the parts shown in *Fig. 6*.

- 75 The baby boy's nappy shown in *Figs. 2* and *3* is formed (see *Fig. 1*) from an inner surface sheet 1a and an outer surface sheet 1b, the sheets 1a and 1b having identical external contours and each being symmetrical about the longitudinal centre line 2 of the nappy as a whole. An opening 3 of somewhat elliptical outline and which is relatively small in this embodiment is provided on the centre line. In use of the nappy (see *Fig. 5*), the baby boy's penis is received through the urine opening 3. The edges of the nappy panel sheets 1a and 1b are inwardly curved at 4 and suitably elasticated by means of an elastic band 5. A second elastic band 6 is suitably provided along a curved line 7 inwardly of the edge 4. Both bands 5 and 6 are suitably fixed at the point marked C, the other end of the respective bands being moveable to allow adjustment in fitting and fastening of the nappy.

- 95 As will be seen, the nappy illustrated in *Figs. 2* and *3* comprises a back panel which, as is clear from *Fig. 4A* is arranged to extend across the baby's back. In the illustrated arrangement, separate fastening wings 8 are fixed to the back panel at its opposite sides and are arranged to be brought around the baby's sides of fastening in front (*Fig. 4A*), for which purpose they may be provided with the co-operating male and female portions 9a and 9b of a press stud, although alternative fastening means such as buckles, etc. may be used.

- The urine opening 3 opens into a urine bag between the two sheets 1a and 1b, which urine bag comprises a plastics bag 10 with one end sealed and the other end open. The bag 10 has an opening 11 which corresponds in size to the urine opening 3. The edges of the holes 3 and 11 are joined, as by sewing. 115 Urine absorptive padding, such as absorptive cotton 12, and a layer of nylon gauze 13 are provided within the bag 10. The gauze 13 is placed across the openings 3 and 11 so as to separate the absorptive padding 12 from the baby's skin. Centre line elastication 2a may also be provided.

- As will be seen from *Fig. 1*, the outer sheet 1b has a generally oblong opening 14 located on its centre line. To the edge of opening 14 is joined a pouch defining portion 15 which is in two separate halves, one half being connected to the edge of opening 14 on each respective side of the centre line, the two portions being connected together, to define a pouch, by a zip 16 which additionally extends

along the cut line 16a which extends from the edge of opening 14 in each direction along the centre line.

We shall now explain how the nappy is fastened about a baby boy with reference to Figs. 4A, 4B and Fig. 5.

The zip 16 on the pouch 15 is opened and absorptive cotton padding 12 is placed within the bag 10 therewithin with nylon gauze 13 at least across the urine opening 3, 11. The open end of bag 10 is then folded over and the zip 16 closed. The absorptive cotton padding 12 is best pushed away from the inner surface layer 1a of the nappy and against the surface of the pouch 15. The back panel defined by the wider end of the nappy is placed under the baby's back and the fastening wings are brought round the baby's sides and fastened in front (see Fig. 4A). The crotch portion is passed between the baby's legs, and with the elasticated bands 5 and 6 stretched by hand, his penis is placed through the urine opening 3. Release of the elasticated bands will bring the inner surface of nappy tightly against the baby's skin to prevent or mitigate leakage or urine in use from the urine bag. The front fastening portion in which the crotch panel terminates is then fastened, as by means of press studs and/or braces which may be provided by fastening ears 17 on the front fastening portion and co-operating shoulder bands 18 fixed to the back panel and which are adapted to pass over the baby's shoulders for fastening on ears 17 as shown in Fig. 4B.

As illustrated in Fig. 5, the zip 16 may be opened to check whether the nappy is properly fitted to the baby boy. As is also clear from Fig. 5, it would be feasible to change the padding 12 when sodden and to replace it with fresh dry padding without having to remove the nappy as a whole from the child.

The nappy described in detail hereinabove with reference to Figs. 1 to 5 is not well suited for baby girls, because of the obvious anatomical differences, or for baby boys of less than four months in age. For such babies, there is provided the alternative embodiment of nappy shown in Figs. 7A and 7B, which nappy may be formed from the parts shown in the exploded view of Fig. 6. As is best shown in Fig. 7B, there are differences in the positioning of the elastic bands in this modified embodiment and the urine opening 3 is very much larger. The zip may be differently positioned, and may, indeed, be omitted altogether since it would be feasible to reach the bag 10 through the urine opening 3 from the inner surface of the nappy before placing the nappy on the child or when changing the nappy. Other parts of the nappy suitable for girls and for small baby boys may be exactly the same as in the first described embodiment. It will be noted, however, that in the embodiment of Figs. 7A and 7B, the back

panel of the nappy is somewhat larger to extend further up the baby's back in use.

# CLAIMS

1. A baby's nappy, comprising: a back panel adapted to extend across a baby's back, and provided with fastening wings arranged to be brought around the baby's sides for fastening in front; a crotch panel, connected to the back panel and terminating in a front fastening portion, and arranged to be passed between the baby's legs and to be brought up in front for fastening, the edges of the crotch panel being curved to define leg openings in the fastened nappy; and a urine bag adapted to receive urine absorptive padding, and opening onto the inner surface of the nappy at a urine opening.
2. A nappy according to Claim 1, wherein the curved edges defining the leg openings are elasticated.
3. A nappy according to Claim 1 or Claim 2, wherein the urine bag is adapted to be opened, for example by means of a zip, on the outer side of the nappy so that the urine absorptive padding may be withdrawn and replaced.
4. A nappy according to any preceding claim, formed from an inner surface sheet adapted to confront the baby's skin and an outer surface sheet, the inner and outer surface sheets being joined along their marginal edges and together defining said urine bag, at least the outer surface sheet being substantially impervious to moisture.
5. A nappy according to Claim 4, wherein the outer surface sheet is adapted to define a pouch for accommodating a mass of urine absorptive padding.
6. A nappy according to Claim 4 or Claim 5 specifically adapted for use on baby boys of age four months or more, in which the urine opening is sized and positioned for receiving the baby's penis therethrough in use.
7. A nappy substantially as hereinbefore described with reference to and as shown in the accompanying drawings.

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